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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,866	12/12/2003	William V. Da Palma	BOC9-2003-0096 (1082-7U)	1522

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,866	DA PALMA ET AL.	
	Examiner	Art Unit	
	MICHAEL C. COLUCCI	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,8 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

NOTE: This action has **not** been made final due merely to recent court decisions regarding claims not being tied to a statutory class or transforming subject matter. See 35 U.S.C. 101 rejection below.

Response to Arguments

1. Applicant's arguments filed 11/26/2008 have been fully considered but they are not persuasive.

Argument (page 5 paragraph 3):

- "Applicants disagree that the Examiner's assertion that paragraphs [0049] and [0053] teach "simulating a text equivalent and an execution time for each of the nominal output and the pre-determined user input." Paragraphs [0049] and [0053] are both silent as to teaching a simulated execution time for each of the nominal output and the pre-determined user input. Thus, the Examiner has mischaracterized the scope and content of Williams."

Response to argument:

Examiner takes the position that Williams and Koehler are both within the scope of the present invention and directly teach methods in parallel with the present invention (present invention [0021]) relevant to XML, voice applications, simulation and testing, and voice call flows, wherein Williams in view of Koehler as a whole clearly appear to teach voice and text equivalents of voice calls for predetermined and nominal output. Further, *nominal output,,* when read in light

of the specification (present invention [0021]) is construed to be functionally equivalent and equally effective to text/voice in a simulated environment, such as having text in training mode versus voice in real-time.

Williams teaches predetermined input and nominal outputs such as buttons pushed by a user having a known/predetermined outcome, wherein Williams teaches The IVR 18 can, among the IVR selections offered, request that the telephone caller enter "identifying information," for example an account number, by button pushes on the telephone keypad or by voice responses from the telephone caller. Identifying information can also be automatically provided by the PBX/ACD 16 without entry by the telephone caller with a variety of methods, including dialed number identification service (DNIS) and automatic number identification (ANI). The identifying information is passed through the PBX/ACD 16 to the bus 26 ([0039]).

Further, Williams teaches real-time calls in VXML, wherein Williams teaches virtual test systems that have been applied to contact centers. For example, virtual telephone caller systems 38 have been provided to simulate telephone callers within the PSTN 12. The virtual telephone caller system 38 can generate "virtual telephone caller actions," for example virtual telephone calls, to the contact center 14, thereby accessing the PBX/ACD 16, the IVR 18, and agent telephones, for example agent telephone 22. The virtual telephone caller system

38 can also receive contact center functions, for example an IVR audio response. With this particular arrangement, the IVR 18 can be tested for response accuracy and response time ([0042]).

Furthermore, Williams teaches that the audio telephone signals can be provided having both a signaling portion and a real time (RT) portion, wherein the signaling portion corresponds to the dialing of a telephone call, and the RT portion corresponds to audio that can either be voice or telephone button pushes corresponding to human telephone caller actions, for example dialing a call, and to human telephone caller responses to actions of the contact center 64. The contact center 64 is also coupled to the PSTN 62 and receives the audio telephone signals generated by the virtual telephone caller system 50. The audio telephone signals are routed to the IVR 66 by the PBX/ACD (not shown), e.g. PBX/ACD 16 of FIG. 1. The audio telephone signals are received by the telephony interface 68. The telephony interface 68 provides an audio to text conversion, thereby providing text representations of the audio telephone signals to the voice extensible markup language (VXML) browser 70. The VXML browser 70 recognizes the text representations provided by the telephony interface 68 and generates a software linkage to a VXML response page, the software linkage communicated to an IVR Server 72. The IVR server, upon receiving the software linkage to the VXML response page, responds with the VXML response page. The VXML response page is converted by the VXML

browser 70 into an IVR audio response. The IVR audio response can be any number of synthesized or pre-recorded voice messages. The IVR audio response is coupled to the telephony interface 68, through which the IVR audio response is coupled to the PSTN 62 ([0048-0049]).

Koehler has been introduced to further strengthen the teachings of Williams, wherein Koehler teaches a segment that generates a progress report of the trainee. The progress report includes a performance assessment based on the trainee including the keywords in the trainee responses corresponding to the dialog segments and a comparison of statistical data stored in the memory segment. The simulator source code segment may further include a software emulation source code segment that provides an emulation of actual call center software to the trainee through a graphical user interface (GUI). The simulator source code segment may also include a voice playback source code segment that records the voice entered trainee portion corresponding to each dialog segment and replays the recorded trainee portion upon instruction received from a GUI (Koehler [0026] & fig. 4).

Further, Koehler teaches that trainers and managers communicate with the training program primarily by text interaction from the trainer terminal 150 and the manager terminal 170, respectively. The trainers manage the training simulations, coach the trainees and report on the various scenarios. The trainers

are able to alter scenarios to particularly address areas of weakness demonstrated by a trainee. Altering the scenarios may be performed in real-time, when desired by the trainer. The trainers are also able to adjust the level of automated feedback available to the trainees, also known as coaching (Koehler [0035] & fig. 4).

Furthermore, Koehler teaches Below the dialog table 502 is a dialog segment overview section 512, which includes a dialog segment identifier 514 and corresponding dialog segment data. The dialog segment identifier 514 indicates that the current dialog segment is the first of 10 dialog segments that comprise the scenario. The dialog segment data includes the date and time 515 of the dialog segment, the score 516, the comparable average 517 of all trainees, the elapsed time 518 used to execute the dialog segment and the total coaching time 519 provided to the trainee. Additional alternative embodiments may include any data that the trainers and/or managers deem appropriate for display during the scenario (Koehler [0075] & fig. 4).

Therefore, the combined teaching of Williams in view of Koehler would render obvious text and execution time for nominal input and pre-determined output, wherein a simulated environment with both text, voice, and timing information which would allow for a better system that can be trained relevant to automated or human call center dialog for better performance in a voice application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because:

Claim 1 does not fall within one of the four statutory categories of invention. Supreme Court precedent[1] and recent Federal Circuit decisions[2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Claim 1 recites purely mental steps and would not qualify as a statutory process. In order to qualify as a statutory process, the method claim should positively recite the other statutory class to which it is tied (i.e. apparatus, device, product, etc.). For example, the method steps of claim 1 appear to recite mental steps such as "simulating a run-time user interaction with a voice application" and do not identify an apparatus

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[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

that performs the recited method steps, such as the computer hardware as described in the specification (present invention [0028-0029]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. US 20030212561 A1 (hereinafter Williams) in view of Koehler et al. US 20030156706 A1 (hereinafter Koehler).

Re claims 1, 8, and 15, Williams teaches a method for simulating ([0034]) a run-time user interaction with a voice application ([0047] & Fig. 6), said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application ([0047] & Fig. 6);

processing the user simulation script ([0034]) to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input for the voice application corresponding to a pre-determined user input ([0048]) to the voice application ([0047] & Fig. 6), wherein

the step of processing further comprises simulating a text equivalent and an execution time for each of the nominal output and the pre-determined user input ([0049] & [0053]), and further comprising the steps of:

b) processing the user simulation script to ([0034]) generate additional simulated outputs ([0071]) for the voice application corresponding to the additional nominal outputs ([0047] & Fig. 6);

c) processing the user simulation script to generate additional simulated inputs to the voice application ([0045]-[0047]); and

d) repeating steps a), b) and c) until the user simulation script is exhausted to simulate a complete set of user interactions with the voice application ([0050] & Fig. 6), in response to and as input for a complete set of user prompts from the voice application ([0066]-[0068]).

However, Williams fails to teach generating both a simulated output for the voice application corresponding to the nominal output and a simulated input deriving from the voice application a nominal output of the voice application;

a) deriving additional nominal outputs of the voice application;

Koehler teaches voice interaction, the trainee receives prerecorded audio files or, alternatively, audio signals from a voice simulator interfaced with the database 212, which simulate a conversation from the customer's perspective. For example, extended mark-up language (XML) strings of text may be received via a voice simulator API in the APIs 214 using hypertext transfer language protocol (HTTP). In an embodiment of the

invention, the voice simulator is based on RealSpeak for Windows text-to-speech software, developed by Lemout & Hauspie Speech Products USA, Inc., which is capable of providing about 16 hours of speech for every one hour of system operation (Koehler [0057]).

Additionally, Koehler teaches that the progress report includes a performance assessment based on the trainee including the keywords in the trainee responses corresponding to the dialog segments and a comparison of statistical data stored in the memory segment. The simulator source code segment may further include a software emulation source code segment that provides an emulation of actual call center software to the trainee through a graphical user interface (GUI). The simulator source code segment may also include a voice playback source code segment that records the voice entered trainee portion corresponding to each dialog segment and replays the recorded trainee portion upon instruction received from a GUI (Koehler [0026]).

Further, Koehler teaches that trainers and managers communicate with the training program primarily by text interaction from the trainer terminal 150 and the manager terminal 170, respectively. The trainers manage the training simulations, coach the trainees and report on the various scenarios. The trainers are able to alter scenarios to particularly address areas of weakness demonstrated by a trainee. Altering the scenarios may be performed in real-time, when desired by the trainer. The trainers are also able to adjust the level of automated feedback available to the trainees, also known as coaching (Koehler [0035] & fig. 4).

Furthermore, Koehler teaches Below the dialog table 502 is a dialog segment overview section 512, which includes a dialog segment identifier 514 and corresponding dialog segment data. The dialog segment identifier 514 indicates that the current dialog segment is the first of 10 dialog segments that comprise the scenario. The dialog segment data includes the date and time 515 of the dialog segment, the score 516, the comparable average 517 of all trainees, the elapsed time 518 used to execute the dialog segment and the total coaching time 519 provided to the trainee. Additional alternative embodiments may include any data that the trainers and/or managers deem appropriate for display during the scenario (Koehler [0075] & fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Williams to incorporate generating both a simulated output for the voice application corresponding to the nominal output and a simulated input deriving from the voice application a nominal output of the voice application and deriving additional nominal outputs of the voice application as taught by Koehler to allow for a trainable voice xml application that utilizes statistical data relative to keywords, wherein audio segments and text are generated in both simulated and real time operation based on previous data (Koehler [0026] & Fig. 4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-

270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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